

Issue Eighteen July 2003

# FOCUS ON FELLOWS: MEGAN TYRRELL 2002–2004

Megan grew up in and around St. Paul, Minnesota. She has always been fascinated with biology and received her bachelor's degree in Biology and Environmental Studies from Macalester College in Minnesota. She went on to receive a master's and a Ph.D. degree from the University of New Hampshire in Zoology with a focus on Marine Biology. During her graduate school career, she conducted research with Larry Harris, her advisor and a marine invertebrate ecologist. The focus of their project was determining the ecological impacts of two introduced crab species, the European Green Crab (Carcinus maenas) and the Asian Shore Crab (Hemigrapsus sanguineus), on New Hampshire. Megan is continuing to work on this project and currently spends her weekends in the New Hampshire rocky

intertidal zone collecting data.

Traveling a total of five hours each day from Maine, where she lives, to Massachusetts, where she works, Megan may have the longest work commute of any fellow, past or current. Thanks to the laptop provided by her host agency, the Massachusetts Office of Coastal Zone Management, her time on the train is well spent. At the Massachusetts Office of Coastal Zone Management, she works on a marine habitat project that has emphasis on habitat mapping and management. Megan works with three mentors, and while that may seem unusual, she feels that it works well. She says that they all get along very well and fulfill different roles in her project.

One of Megan's main tasks is to research and inventory existing data and maps relevant to marine habitat within Massachusetts. This information will make it possible to create a marine habitat database that resource managers can utilize. Although the

emphasis is on state waters, marine habitat data for federal waters will also be included. After identifying all of the data types related to marine habitat, Megan chose substrate characteristics and physical oceanographic data to begin her project. She is conducting data mining for large-scale and small-scale data sets as well as data sets generated by side-scan sonar and multibeam sonar. Megan has also researched and inventoried marine habitat mapping projects, although that type of information is more difficult to find. Once the existing habitat data and maps have been compiled, Megan will configure them so they can be incorporated into the Massachusetts Ocean Resource Information System, a GIS relational database designed for marine resource managers that encompasses both spatial and non-spatial data.

Another part of her project is to refine the essential components of an outline for Massachusetts'

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# FOCUS ON FELLOWS: 2003–2005

During the fellowship matching workshop held in Charleston, South Carolina, from April 22 to 25, five fellows were matched with five state coastal zone management programs to work on various projects.

# California



Jennifer Dare and Mark Johnsson

Fellow Jennifer **Dare** was matched with the California Coastal Commission to work on a project entitled, "Development of a Predictive Tool for Coastal Bluff Erosion." She will complete a Master of Science in Marine Resource Management with a minor in Earth Information Science and Technology from Oregon State University this summer. Her mentor, Mark Johnsson,

is a staff geologist at the California Coastal Commission. The goal of this project is to develop a database that catalogs coastal erosion rates for areas of the California coast and create a pilot GIS-based erosion prediction tool based on these data.

# Delaware



Dave Carter, Ed Cervone, & Jim Poling

Fellow Ed Cervone was matched with the **Delaware Coastal** Management Program and Delaware Division of Air and Waste Management to work on a dual agency project entitled. "Development of a Brownfields Restoration and Re-Use Site Description Compendium for Coastal Communities." Ed will complete a Master of Science in Ecology and Environmental Science with a concentration in Environmental Policy and Management from the University of Maine this summer. Ed's primary

mentor, **Dave Carter**, is the environmental program manager for Delaware's Coastal Programs. His secondary mentor, Jim **Poling**, is the brownfields coordinator for the Delaware Division of Air and Waste Management. The goal of this project is to increase the rate and acreage of Brownfield restoration and re-use in Delaware's coastal communities, thereby reducing development pressures and associated coastal impacts in undeveloped areas.

### Minnesota



Tricia Ryan and Dave Easter

Fellow **Dave Easter** was matched with Minnesota's Lake Superior Coastal Program to work on a project entitled, "Development of a Permit Monitoring and Compliance System for the Coastal Area of Minnesota." Dave completed a Master of Science in Geography from Oregon State University in



the fall of 2002. His mentor, *Tricia Ryan*, is manager of Minnesota's Lake Superior Coastal Program. The goal of this project is to develop a permit monitoring and compliance system to collect data for evaluation and better decision making to ensure the proper protection of the resources.

# **South Carolina**



Rebekah Walker and Steve Moore

Fellow Rebekah **Walker** was matched with the South Carolina Department of Health and **Environmental Control** Office of Ocean and Coastal Resource Management (SCDHEC-OCRM) and the South Carolina Department of Natural Resources (SCDNR) to work on a dual agency project entitled, "Molluscan Shellfish Management Plan." Rebekah will complete a dual Master of Science in Coastal Zone Management and Marine Biology from Nova Southeastern

University this summer. Her primary mentor, **Steve Moore**, is the director of planning at SCDHEC-OCRM and **Bill** 

Anderson, her secondary mentor, is the assistant supervisor at the SCDNR Shellfish Management Program. The goal of this project is to restore and sustain the shellfish resource in South Carolina at levels that balance the ecological benefits and human use of the resources.

# Washington



Sophie De Beukelaer and Brian Lynn

Fellow **Sophie De Beukelaer** was matched with the Washington
Shorelands and
Environmental Assistance
Program to work on a project entitled,
"Developing a Shoreline
Assessment Curriculum."
Sophie completed a dual Master of Science in
Geosciences and
Oceanography from Texas
A&M University in May

2003. Her mentor, *Brian Lynn*, is the manager of the Washington Department of Ecology's guidance outreach and assistance team. The goal of this project is to develop a shoreline assessment curriculum for integrating scientific information into the next generation of shoreline management plans.

The fellowship matching workshop was exciting and exhausting for everyone involved. Each day was chock-full of presentations, interviews, and field trips. Due to travel constraints, the New York Division of Coastal Resources decided to defer fellowship placement for one year giving the South Carolina Office of Ocean and Coastal Resource Management, the first state alternate, the opportunity to interview for a fellow. Maine Coastal Program did not receive a match and will also defer fellow placement for one year. Congratulations to the 2003-2005 Coastal Management Fellows—we look forward to reading about your projects and experiences. ♦

(continued from page 1) marine habitat management plan. To accomplish this, Megan coordinates meetings with the marine habitat working group, which is made up of federal and state agencies, nonprofit organizations, and stakeholder groups. Input from this group is important because members are involved with marine habitat issues and possess most of the state's marine habitat mapping capabilities and expertise. Megan is also in the process of gathering additional information that relates to the outline. For instance. after identifying spatial gaps based on the marine habitat data and map inventory, she will identify funding sources to help fill them. She is also looking for case studies of management applications of marine habitat data and mapping to include in the management plan. Megan feels that the outline will be complete and a few sections of the plan will be written before she finishes her fellowship.

In addition to working on the marine habitat strategic plan, Megan has had the opportunity to be involved in other projects at the Massachusetts Office of



An adult and juvenile penguin on Robben Island, South Africa.

Coastal Zone Management. She has assisted with field work to assess the health of wetlands near Cape Cod and has submitted a grant proposal to conduct nearshore mapping with fishermen using standardized protocols and data sheets. She feels that the fellowship has "opened her eyes" to government's role in managing our resources and hopes to stay in New England at the end of her fellowship. She would also like to continue to work in government and transition into more of a research role.

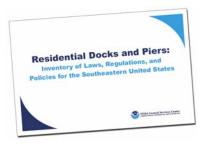
Megan recently returned from a two-week vacation that celebrated the completion of her Ph.D. and incorporated two of her passions: hiking and research. She and her

mom traveled to Robben Island, South Africa, infamous as Mandela's incarceration site, to participate in an Earthwatch Institute research expedition. They chose a research project designed to test an innovative tagging system on a threatened penguin population. During their adventure, they had the opportunity to hike, tour the prison where Mandela was held, and talk with local people about the changes in South Africa. Although Megan's mom broke two of her fingers during one of their treks, Megan asserts that "it was the trip of a lifetime." ♦

For more information about Massachusetts' marine habitat project, e-mail Megan at Megan. Tyrrell@state.ma.us



# FOCUS ON THE CENTER: RESIDENTIAL DOCKS AND PIERS INVENTORY



For many state regulatory programs, docks and piers take up a considerable amount of their time. When is a dock too long? What about crossing extending property lines? And at what point does a creek have too many docks?

At the request of the Georgia Coastal Management Program, the NOAA Coastal Services Center compiled dock and pier information on four states – Florida, North Carolina, South Carolina, and Georgia. The inventory includes information on federal laws as well as state laws and regulations, permitting policies, and contact information for each state.

"Before you try something new in your state, it is always helpful to learn from those who have treaded before you," says Melissa Patterson, who compiled the information. "We included simple information, like how much a dock permitting fee costs, to the more complex requirements for docks. But because of the tabular format, the information is easy to find." •

To get a copy of the residential docks and piers inventory, call Melissa Patterson at (843) 740-1200, or e-mail her at Melissa.Patterson@noaa.gov.

FOCUS ON
FELLOWSHIP
PARTNERS: OFFICE
OF OCEAN AND
COASTAL RESOURCE
MANAGEMENT



The NOAA Office of Ocean and Coastal Resource Management (OCRM) supports the fellowship program by serving on the fellow and project selection panels.

Ralph Cantral, chief of OCRM's National Policy and Evaluation Division, attended the triennial fellowship review panel held in September 2002 at the NOAA Coastal Services Center to offer his perspective on all aspects of the program.

OCRM was asked to be a fellowship partner because of its role with coastal zone management (CZM) programs. OCRM is responsible for implementing the Coastal Zone Management Act (CZMA), which created the CZM program. OCRM works directly with coastal states and territories to support the development of new CZM programs, provide technical and financial assistance to coastal program and reserve operations, undertake projects with program-wide or systemwide benefits, integrate information from all of the CZM programs to support activities at the national level, and promote coastal stewardship on a variety of critical coastal issues. •

If you would like more information about OCRM, please visit their Web site at www.ocrm.nos.noaa.gov/.



# **Upcoming Conferences & Events**

# **JULY**

# 3-5: Society for Conservation GIS (SCGIS) Annual Conference

Location: Pacific Grove, California

www.scgis.org/2003 conference/conference 2003.html

# 7-11: ESRI Annual Conference

Location: San Diego, California <a href="https://www.esri.com/events/uc/index.html/">www.esri.com/events/uc/index.html/</a>

#### 11-15: National Association of Counties Annual Conference

Location: Milwaukee, Wisconsin

www.naco.org/Content/NavigationMenu/Conferences and Events/Annual/2003 Annual

Conference Overview.htm

#### 13-17: Coastal Zone 03

Location: Baltimore, Maryland <a href="https://www.csc.noaa.gov/cz2003/">www.csc.noaa.gov/cz2003/</a>

# 20-22: 22nd Annual Public Participation GIS Conference

Location: Portland, Oregon www.urisa.org/PPGIS/ppgis.html

For a complete listing of upcoming conferences & events, visit: www.csc.noaa.gov/cms/conferences.html

